



Attorney Docket No.: 020945-001510US

JPW 2133 \$  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Xiaopeng Chen et al.

Application No.: 09/882,283

Filed: June 14, 2001

For: METHOD FOR ITERATIVE AND  
NON-ITERATIVE DATA DETECTION  
USING REDUCED-STATE SOFT-  
INPUT/SOFT-OUTPUT ALGORITHMS  
FOR COMPLEXITY REDUCTION

Customer No.: 20350

Confirmation No.: 7871

Examiner: Joseph D. Torres

Art Unit: 2133

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER 37  
CFR §1.97 and §1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references [in compliance with the requirements of 1287 OG 163] are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or

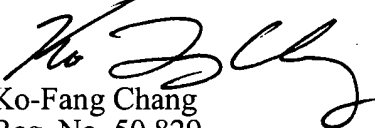
Notice of Allowance.

08/26/2005 EHAILE1 00000007 201430 09882283

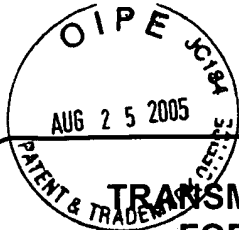
01 FC:1806 180.00 DA

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

  
Ko-Fang Chang  
Reg. No. 50,829

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Two Embarcadero Center, Eighth Floor  
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Tel: 650-326-2400 Fax: 650-326-2422  
KFC:djb



PTO/SB/21 (09-04)

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

# of Pages in This Submission

7 w/7 refs

Application Number

09/882,283

Filing Date

June 14, 2001

First Named Inventor

Chen, Xiaopeng

Art Unit

2133

Examiner Name

Joseph D. Torres

Attorney Docket Number

020945-001510US

**ENCLOSURES** (Check all that apply)☒ **PTO/SB/17 Fee Transmittal** (1pg submitted in duplicate)☐ Fee Attached☐ Amendment/Reply☐ After Final☐ Affidavits/declaration(s)☐ Extension of Time Request☐ Express Abandonment Request☒ **Supplemental Information**  
**Disclosure Statement w/PTO/SB/08A&B**  
(3pgs)☐ Certified Copy of Priority Document(s)☐ Reply to Missing Parts/ Incomplete Application☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53☐ Drawing(s)☐ Licensing-related Papers☐ Petition☐ Petition to Convert to a Provisional Application☐ Power of Attorney, Revocation Change of Correspondence Address☐ Terminal Disclaimer☐ Request for Refund☐ CD, Number of CD(s) \_\_\_\_\_☐ Landscape Table on CD☐ After Allowance Communication to TC☐ Appeal Communication to Board of Appeals and Interferences☐ Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)☐ Proprietary Information☐ Status Letter☒ Other Enclosure(s) (please identify below):

this PTO/SB/21 Transmittal Form (1pg)

copies of 7 cited references

Return Postcard

Remarks

The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name

Townsend and Townsend and Crew LLP

Signature

Printed name

Ko-Fang Chang

Date

August 23, 2005

Reg. No.

50,829

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature

Typed or printed name

DJ Bogorodsky

Date

August 23, 2005

AUG 25 2005

PTO/SB/17 (12-04)

Effective on 12/08/2004.  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** (\$) 180

### Complete if Known

Application Number	09/882,283
Filing Date	June 14, 2001
First Named Inventor	Chen, Xiaopeng
Examiner Name	Joseph D. Torres
Art Unit	2133
Attorney Docket No.	020945-001510US

### METHOD OF PAYMENT (check all that apply)

☐ Check 
 ☐ Credit Card 
 ☐ Money Order 
 ☐ None 
 ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account 
 Deposit Account Number: 20-1430 
 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below 
 ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 
 ☒ Credit any overpayments

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### FEE CALCULATION

#### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

#### 2. EXCESS CLAIM FEES

Fee Description	Small Entity Fee (\$)	Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
-20 or HP =	x	=				

HP = highest number of total claims paid for, if greater than 20

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
-3 or HP =	x	=	

HP = highest number of independent claims paid for, if greater than 3

#### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	=	

#### 4. OTHER FEE(S)

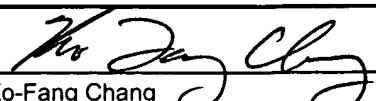
Non-English Specification, \$130 fee (no small entity discount)

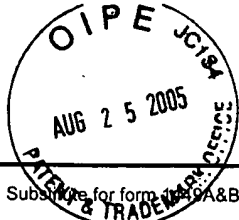
Other: Submission of Information Disclosure Stmt

**Fees Paid (\$)**

180

#### SUBMITTED BY

Signature		Registration No. (Attorney/Agent) 50,829	Telephone 650-326-2400
Name (Print/Type)	Ko-Fang Chang		Date August 23, 2005



<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	09/882,283
				Filing Date	June 14, 2001
				First Named Inventor	Chen, Xiaopeng
				Art Unit	2133
				Examiner Name	Joseph D. Torres
Sheet	1	of	1	Attorney Docket Number	020945-001510US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AA	R.G. GALLAGER, "Low-Density Parity-Check Codes", IRE Transactions on Information Theory, 1962	
	AB	L.R. BAHL et al., "Optimal Decoding of Linear Codes for Minimizing Symbol Error Rate", IEEE Transactions on Information Theory, March 1974	
	AC	S. Lin et al., "Error Control Coding: Fundamentals and Applications - 3 Linear Block Codes", Prentice Hall, 1983	
	AD	D.J.C. MACKAY et al., "Near Shannon limit performance of low density parity check codes", Electronic Letters, vol. 32, no. 18, August 1996	
	AE	S.M. AJI et al., "The Generalized Distributive Law", IEEE Transactions on Information Theory, vol. 46, no. 2, March 2000	
	AF	F.R. KSCHISCHANG et al., "Factor Graphs and the Sum-Product Algorithm", IEEE Transactions on Information Theory, vol. 47, no. 2, February 2001	
	AG	T.J. RICHARDSON et al., "Design of Capacity-Approaching Irregular Low-Density Parity-Check Codes", IEEE Transactions on Information Theory, vol. 47, no. 2, February 2001	
	AH		

Examiner Signature		Date Considered	
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.